

DISCUSSION OF THE AMENDMENT

Claim 1 has been amended by replacing "derivatives" with particular derivatives, as supported in the specification at page 5, lines 6-15. New Claim 17 has been added, which limits the polar unsaturated monomer to maleic anhydride. The remaining amendments are clerical in nature, such as the insertion of appropriate Markush terminology.

No new matter is believed to have been added by the above amendment. Claims 1-17 are now pending in the application.

REMARKS

The rejection of Claims 1-8 and 10-16 under 35 U.S.C. § 102(b) as anticipated by US 5,122,569 (Scheibelhoffer et al), is respectfully traversed. Scheibelhoffer et al is drawn to a thermoplastic multiphase composition which is a melt blend of a functionalized block or graft copolymer and a polyamide. The functionalized block or graft copolymer is the result of coupling of an elastomeric polymer and a reactive polymer (Abstract). The elastomer is preferably an EPDM elastomer (column 5, last two lines). While the second or reactive polymer has at least one reactive functionality therein (column 6, line 6ff), and while the functionalities include maleic anhydride (column 6, lines 36-37), Scheibelhoffer et al requires that this component be a **polymer**. In the present invention, on the other hand, the recited polyolefins are functionalized with a **monomer**. In addition, during the process of reaction of Scheibelhoffer et al's elastomer and reactive polymer, no "functionalization" of the olefin polymer EPDM takes place, since the reactive polymer, even if containing maleic anhydride functionality, does not contain **free** maleic anhydride (or any other unsaturated monomer having a carboxylic function). Accordingly, it is respectfully requested that the rejection be withdrawn.

The rejection of Claims 1-12, 15 and 16 under 35 U.S.C. § 103(a) as unpatentable over US 2003/0013623 (Tse et al), taken in view of US 6,569,937 (Foulger et al), is respectfully traversed. Tse et al is drawn to an oil soluble viscosity index improver comprising a mixture of at least one molecular weight degraded copolymer of ethylene and at least one other alpha-olefin monomer; and at least one substantially undegraded copolymer of ethylene and at least one other alpha-olefin monomer (Abstract). Tse et al discloses a preferred degradation method using free radical initiators such as peroxides, where an acid or acid anhydride, such as maleic anhydride, can be present with the peroxide to promote decomposition of the peroxide in order to activate it [0118]. Indeed, one skilled in the art

would not appreciate from Tse et al Applicants' discovery herein, as described in the specification and as exemplified by the comparative data therein. Rather than crosslinking of polyolefins, such as EPDM, which occurs with the use of peroxides as initiators, Applicants have discovered that a hydroperoxide, as required by the present claims, produces a different result. Compare Example 1 herein with (Comparative) Example 3, which uses a non-hydroperoxide, i.e., dicumyl peroxide as the initiator, and the data in Table 1 in the specification at page 10, lines 5-13. While Tse et al discloses the use of hydroperoxides [0118], it is only disclosed as a substitute for the more preferred peroxides. Thus, Tse et al does not disclose functionalization of either of their copolymers of ethylene and at least one other alpha-olefin monomer, let alone with maleic anhydride or a derivative thereof as recited in above-amended Claim 1.

Foulger et al does not remedy any of the above-discussed deficiencies in Tse et al.

For all the above reasons, it is respectfully requested that this rejection be withdrawn.

The rejection of Claims 1, 3-9, 11, 12, 15 and 16 under 35 U.S.C. § 103(a) as unpatentable over US 6,383,439 (Schauder) taken in view of US 6,060,551 (Ooyama et al), is respectfully traversed. Schauder discloses EP(D)M elastomers graft modified with preferably maleic anhydride (column 4, lines 7-8), in the presence of an optional free radical initiator (column 3, line 34), wherein typical free radical agents are disclosed, such as various peroxides and azonitriles (column 3, lines 54-62). The Examiner finds that Schauder also discloses a hydroperoxide, although that is not evident from the particular listing of peroxides therein. Nevertheless, like Tse et al above, Schauder does not recognize the significance of the use of a hydroperoxide compared to a peroxide, for reasons discussed above. Nor does Schauder recognize the significance of the hydroperoxide as initiator even being present since, as discussed above, the initiator in Schauder is optional. (Comparative) Example 2 herein shows that the omission of an initiator significantly affects the final product. See

Table 1 in the specification herein, *supra*. In other words, insignificant functionalization occurs.

Ooyama et al does not remedy any of the above-discussed deficiencies of Schauder.

For all the above reasons, it is respectfully requested that this rejection be withdrawn.

The provisional rejections of Claims 1-16 on the ground of nonstatutory obviousness-type double patenting over Claims 1-10 of copending Application No. 11/294,569 (US 2006/0135697) (Tanaglia '569), and over Claims 1-13 of copending Application No. 11/100,522 (US 2005/0239666) (Tanaglia '522), are respectfully traversed.

The Examiner is respectfully requested to hold the rejections in abeyance until the present claims are found to be allowable but for this rejection or the copending applications have been patented. See M.P.E.P. 822.01.

For all the above reasons, it is respectfully requested that the provisional rejection be held in abeyance, if not withdrawn.

The rejections of Claims 1-16 under 35 U.S.C. § 112, first and second paragraphs, are respectfully traversed. Indeed, the rejections would now appear to be moot in view of the above-discussed amendment. Accordingly, it is respectfully requested that the rejections be withdrawn.

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Reply to Office Action of January 4, 2007

All of the presently-pending claims in this application are now believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Respectfully submitted,

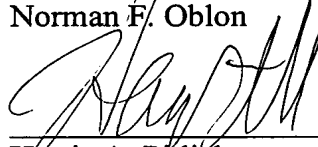
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